

EXHIBIT A

**TO DECLARATION OF S. MERRILL WEISS IN
SUPPORT OF PLAINTIFF ACACIA MEDIA
TECHNOLOGIES CORPORATION'S MEMORANDUM
OF POINTS AND AUTHORITIES IN OPPOSITION TO
ROUND 3 DEFENDANTS' MOTION FOR SUMMARY
JUDGMENT OF INVALIDITY UNDER 35 U.S.C. § 112
OF THE '992, '863, AND '702 PATENTS; AND
SATELLITE DEFENDANTS' MOTION FOR
SUMMARY JUDGMENT OF INVALIDITY OF THE
'992, '863, AND '720 PATENTS**

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Merrill Weiss Group LLC

Consultants in Electronic Media Technology / Management

Resume of S. Merrill Weiss

SUMMARY:

- Over forty-one years experience in broadcasting and related fields with over thirty-one years in management and consulting.
- Executive management as president of a start-up electronics company.
- Management of a large, in-house technical design and construction operation with significant staff and budget responsibilities.
- Project management from concept and definition, through planning and budgeting, systems and technical design, to supervision of installation and operation.
- All aspects and levels of broadcast station technical operation and management.
- Extensive participation in FCC Advisory Committee on Advanced Television Service process for selection of the next generation of television for the United States.
- Designed systems and techniques that have become industry standards, both documented and de facto. Responsible for technical support of several significant changes to FCC Rules.
- Presented or published over one hundred papers or articles on various aspects of video, digital video compression, High Definition Television, broadcasting, and wireless cable. Author of two books on ATV/DTV/HDTV.
- Member or chairman of numerous industry technical standards committees and producer of several tests and demonstrations leading to important international standards. Co-chairman of EBU/SMPTE Task Force on Harmonized Standards for Exchange of Program Material as Bit Streams. Founder and facilitator of the Video Services Forum.
- Fellow of Society of Motion Picture and Television Engineers (SMPTE) and highest level of Certification (Professional Broadcast Engineer) by Society of Broadcast Engineers. Recipient of David Sarnoff Gold Medal (1995), Progress Medal (2005) – both SMPTE. Recipient: NAB Television Engineering Achievement Award (2006). Nominated for Emmy Award (1993).

PROFESSIONAL EXPERIENCE: Detailed on the following pages.

AWARDS, PATENTS, EDUCATION, CERTIFICATION, LICENSES: Follows Professional Experience.

PROFESSIONAL ACTIVITIES: See Attachment A.

PAPERS AND PUBLICATIONS: See Attachment B.

S. Merrill Weiss*Consultant in Electronic Media Technology/Management***PROFESSIONAL EXPERIENCE:**

February, 1991 to Present
Consultant in Electronic Media
Technology / Management

Merrill Weiss Group LLC
227 Central Avenue
Metuchen, NJ 08840-1242

Providing consulting services in the general area of electronic media technology, technology management, and general management to a wide range of clients. Included among international clients have been investment bankers, research laboratories, industry organizations, intellectual property attorneys, manufacturing companies, television networks, television stations and group owners, wireless cable and wireless broadband access system operators, cable multiple system operators, the United States government, and major Hollywood studios. Assignments have included analysis of technology and management of a take-over target; development of digital image compression technology for use by an industry segment; development of technology strategies for several companies and industry segments; participation in government and industry standardization activities; serving as an expert witness; facilitation of an industry organization for technology and operations coordination among cooperating/competing companies; market research; request for proposal and proposal preparation for system and equipment purchases and sales, respectively; system analysis; propagation/interference analysis; FCC license application preparation; project management; studio, earth station, and transmitter plant system design and implementation; system automation; report writing and editing; among others.

October, 1985, to April, 1991
Managing Director,
Advanced Television Systems
Managing Director,
Systems Engineering

Operations and Technical
Services
National Broadcasting Co.
30 Rockefeller Plaza
New York, NY 10112

As Managing Director, Systems Engineering, held management responsibility for in-house technical design and construction activity for NBC facilities in New York and Burbank. Turned organization around to on-time and on-budget performance while increasing size of activity from \$30 million to \$50 million in annual project load. Responsible for projects that started the automation of NBC studio facilities and on-air delayed playback. Oversaw numerous other projects while supervising staff of 140+, including union and management, with 36 design engineers. Initiated conversion to Computer Aided Design (CAD) and computer supported project management using IBM mainframe, workstations, and networked PCs for fully integrated department management, project reporting and control.

As Managing Director, Advanced Television Systems, had responsibility for NBC's work in the development of Advanced Television systems. This included NBC participation in Advanced Compatible Television (ACTV), a single channel, compatible EDTV system, and in Advanced Television Research Consortium (ATRC) development of Advanced Digital HDTV (AD-HDTV), a simulcast HDTV system for terrestrial broadcast. Represented NBC in the FCC Advisory Committee on Advanced Television Service process, including numerous committee activities. Also had responsibility for NBC production in HDTV in support of research and demonstrations. Managed ATRC demonstration at 1990 National Association of Broadcasters (NAB) Convention.

S. Merrill Weiss*Consultant in Electronic Media Technology/Management*

February, 1984, thru October, 1985
President

Imagex Corporation
5500 Shellmound Street
Suite 200
Emeryville, CA 94608

Part of a group that put together a company to work in the image database and video editing fields. Included were systems integration and software development. A video editor was developed and sold to another company to continue its development and bring it to market. The software written to support the image database had wide applications in other fields and was sold for those purposes. The image database product was demonstrated to a number of potential customers with quite positive responses, but required venture funding to complete its development was not obtained. The company therefore ceased operation.

February, 1978, thru January, 1984
Engineering Manager
Assistant Engineering Manager

KPIX Television
Westinghouse Broadcasting Co.
855 Battery Street
San Francisco, CA 94111

As Assistant Engineering Manager, designed and supervised the construction of a new studio facility for this major, fifth market TV station within a two-year time frame. Included in the project was design of a microcomputerized machine control system upon which the SMPTE/EBU standard is partially based. Also designed a microcomputerized control system which interfaced videotape cartridge machines to both a master control automation system and the machine control system. Devised the first use of alphanumeric displays in production equipment, including video switchers, routing switchers, and audio consoles. Numerous design innovations made KPIX the model for new stations and major upgrades for nearly a decade. Also responsible for day-to-day operations of old and new facilities. Responsible for FCC rules compliance and for preparing comments for Group W (Westinghouse) to FCC rule-making proceedings. Upon completion of new facility, began five year program of further development contemplated in the initial design.

As Engineering Manager, managed an engineering department with a staff of 50+, operating budget of \$2.5+ million, and capital outlays accumulating to \$4+ million at any one time. Designed and managed construction of \$1+ million earth station facility, including San Francisco's first broadcast uplink. Purchased and installed first Central Lending Library still store system and first U.S. installation of new, fully automated studio cameras. Designed and purchased telco bypass system using non-broadcast microwave frequencies to control costs by replacing leased lines. Completed five-year development program in four years.

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April, 1976, to February, 1978
Engineering Supervisor

KYW Television
Westinghouse Broadcasting Co.
Independence Mall East
Philadelphia, PA 19106

Managed design and installation projects, day-to-day operations, remotes, and special program activities. Supervised crew producing nationally syndicated Mike Douglas Show. Supervised first complete conversion of a major market television station news operation to ENG. Produced first international satellite broadcast by a local television station, feeding a domestic one-time-only network.

March, 1972, to April, 1976
Engineering Technician

KYW Radio
Westinghouse Broadcasting Co.
Independence Mall East
Philadelphia, PA 19106

Participated in design and installed new studio facilities for this all-news radio station. Designed and built specialized equipment for news operations including one of the first high fidelity radio ENG operations; full duplex, special purpose radios, including portables, to extend the studio into the field; and a network alerting system for the Group W radio group.

April, 1968, to March, 1972
Engineering Technician

WHYY, Incorporated
WHYY-TV, WUHY-TV, WUHY-FM
Philadelphia, PA 19106

Designed and built new studio facilities for this public broadcaster's radio station. Helped construct Pennsylvania Public Television Network's initial Network Operations Center, located at WHYY. Involved in day-to-day operation of the stations and in maintenance.

February, 1967, to April, 1968
Engineering Technician

WIP Radio & WMMR-FM
Metromedia Broadcasting
Philadelphia, PA 19103

Involved in day-to-day operation of the stations and in maintenance.

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LITIGATION EXPERIENCE – Expert Witness

Superguide Corporation vs. DirecTV Enterprises vs. Gemstar Development Corporation
Civil Action No. 1:00 CV 144-T, United States District Court for the Western District of
North Carolina, Asheville Division

Parental Guide of Texas, Inc. vs. Funai Corporation, Inc., et al
Civil Action No.: 2:00 CV 262, United States District Court for the Eastern District of
Texas, Marshall Division

Zenith Electronics Corporation v. WH-TV Broadcasting Corporation and WH-TV Broadcasting
Corporation v. Zenith Electronics Corporation, Motorola, Inc. and General Instrument
Corporation
Civil Action No. 01C 4366, United States District Court for the Northern District of Illinois,
Eastern Division

Acacia Media Technologies Corporation vs. New Destiny Internet Group, et al.
Civil Action No. 05 CV 01114 JW, United States District Court for the Northern District of
California, San Jose Division

S. Merrill Weiss

Consultant in Electronic Media Technology/Management

AWARDS, PATENTS, EDUCATION, CERTIFICATION, LICENSES:

Elected Fellow by Society of Motion Picture and Television Engineers (SMPTE), 1987.

Emmy Award nomination by National Academy of Television Arts and Sciences (NATAS), 1993, for "development of the technology and the international consensus on standards for the Serial Digital Interface for interconnection of television equipment."

David Sarnoff Gold Medal Award recipient, SMPTE, 1995, "recognizing outstanding contributions in the development of new techniques or equipment that have contributed to the improvement of the engineering phases of television ..."

Progress Medal Award recipient, SMPTE 2005, "honoring the individual by recognizing outstanding technical contributions to the progress of engineering phases of the motion picture and/or television industries, ... awarded for an invention or for research or development that ... has resulted in a significant advance in the development of motion picture or television technology. ...[C]ontinued technical contributions over a period of years ... weighed as an important factor."

Television Engineering Achievement Award, National Association of Broadcasters (NAB), 2006, "for pioneering work in the development of advanced television technologies and applications ... for outstanding leadership in setting international standards for digital television production and transmission ... and for nearly 40 years of commitment to the highest standards of excellence in design, implementation, and management of television engineering."

U.S. Patent No. 5,812,220, "Television Transmission System Having Signal and Antenna Element Redundancy." Describes a method for combining a multiplicity of high power digital television stations into a single antenna in a small aperture. (Issued September 22, 1998)

U.S. Patent No. 7,110,048, "Digital Signal Transmitter Synchronization System." Describes a method for synchronizing digital transmitters to form a Single-Frequency Network (SFN). The technology described was adopted by the Advanced Television Systems Committee (ATSC) and provides the foundation for the ATSC Synchronization Standard for Distributed Transmission (A/110). (Issued September 19, 2006)

B.B.A., 1976, Wharton School, University of Pennsylvania.
(Bachelor of Business Administration, Major in Management)

Certified Professional Broadcast Engineer, by Society of Broadcast Engineers (SBE), certified since 1980, endorsed for both AM/FM and Television (first person certified for both).

Academy of Digital Television Pioneers, Original Member

First Class FCC Radiotelephone license, since 1962.

Second Class FCC Radiotelegraph license, since 1962.

Amateur Extra Class FCC license, K2MW, since 1962 (first licensed 1959).

FCC ADVISORY COMMITTEE ON ADVANCED TELEVISION SERVICE:

Systems Subcommittee:

Member, 1988 to 1995 (completion).

Systems Subcommittee Working Party 1 on Systems Analysis (SS/WP-1):

Member, 1988 to 1995 (completion);

SS/WP-1 Task Force on Systems Analysis: Member, 1990 to 1995 (completion).

SS/WP-1 COFDM Certification Expert Group: Member, 1995 (inception to completion)

Systems Subcommittee Working Party 3 on Economic Analysis (SS/WP-3):

Member, 1988 to 1995 (completion).

Implementation Subcommittee:

Member, 1988 to 1995 (completion).

Implementation Subcommittee Working Party 1 on Policy & Regulation:

Member, 1989 to 1995 (completion).

Implementation Subcommittee Working Party 2 on Transition Scenarios:

Vice Chairman, 1988 to 1995 (completion); Acting Chairman, 1989 to 1995.

Technical Sub-Group of the Special Panel, Expert Groups on Transport and Transmission

Member, 1993 to 1995 (completion).

SOCIETY OF MOTION PICTURE AND TELEVISION ENGINEERS:

Society of Motion Picture and Television Engineers (SMPTE):

Member, 1978 to present;

Elected Fellow, 1987;

Engineering Director for Television, 1996 through 1999. Had broad responsibility for organization and management of television standards development on worldwide basis.

SMPTE Working Group on Digital Video Standards (WG-DVS):

Member, 1977 (inception) to 1985 (when superseded by WG-SVS);

Member, Drafting Committee for Composite Digital Interface Standard, Sept., 1978, to Feb., 1980;

Co-produced First Demonstrations of Component-Coded Digital Video, San Francisco, February, 1981, which were held at KPIX and which led to the first international agreement on digital sampling and coding, later embodied as standards in CCIR (now ITU-R) Recommendation 601 and SMPTE 125M;

Member, Subcommittee on NTSC/Digital Interface, Apr. to Nov., 1981;

Member, Sub-Group on Digital Studio Implementation, June, 1981, to Nov., 1982.

SMPTE Working Group on Digital Control of Television Equipment:

Member, 1978 (inception) to 1984;

Conducted tests, held at KPIX in October, 1980, that validated the standard interface then being adopted by the Working Group. KPIX had the only large system compatible with the proposed standard and on which it could be tested. Personally designed KPIX microcomputer network and interfaces on which SMPTE standard was based.

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SMPTE Working Group on Component Analog Video Standards (WG-CAVS):

Chairman, 1982 (inception) to 1985 (when superseded by WG-SVS);

Committee developed three standards simultaneously, two in coordination with the European Broadcasting Union (EBU). It also conducted four tests and public demonstrations of its techniques. This led to use throughout the industry of component analog techniques in facilities for over a decade.

SMPTE Working Group on Studio Video Standards (WG-SVS):

Chairman, 1985 (inception) to 1988;

Committee superseded both WG-DVS and WG-CAVS with broad responsibility for all video interface documentation for studio applications at standard scan rates. Personally developed strategy that led to conversion of television production from 8-bit to 10-bit amplitude resolution, including development of 10-bit Serial Digital Interface (SDI) at 270 Mb/s for component operation and 143 Mb/s and 177 Mb/s for composite operation that is now widely applied worldwide. Received Emmy Award nomination for this work.

SMPTE Working Group on Advanced Television Production (WG-ATVP):

Member, 1989 (inception) to 1996 (completion);

Committee had broad responsibility for all video interface documentation for studio applications at scan rates above the current standard;

Chairman, Ad Hoc Group on Document Design and Writing, 1989 to 1995;

Chairman, Ad Hoc Group on Systems Issues, 1989 to 1991.

SMPTE Working Group on ATV Studio Systems Design

Member, 1991 (inception) to 1996 (completion);

Chairman, Ad Hoc Group on Small Station and Cable Headend Considerations, 1992-1996.

SMPTE Working Group on Headers and Descriptors

Member, 1992 (inception) to 1998 (completion);

Committee developed techniques to permit transportation of digital video and audio data intermixed with unrelated data in a general purpose digital communications channel. Personally helped forge compromise that led to SMPTE Universal Labels standard.

SMPTE Committee on Television Technology (T14)

Member, 1982 through 1991 (completion);

Chairman, 1988 through 1991 (completion);

Committee oversaw activities of Working Groups on Advanced Television Production, Digital Audio Interfaces for Television, Digital Control of Television Equipment, Professional Studio Monitors, Studio Video Standards, the Study Group on Monitoring and Diagnostics in Digital Video Systems, and others.

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SMPTE Committee on Television Production Technology (P18)

Chairman, 1992 (inception) through 1995;

Member, 1996 through 1998 (completion);

Committee had general responsibility for all standardization of matters related to television production, including such items as Television Compression Systems, Digital Headers and Descriptors, MPEG Liaison and Testing, Digital Control of Television Equipment, Editing Procedures, Time Code, and the like.

SMPTE Committee on Television Signal Technology (T14)

Member, 1992 (inception) through 1998 (completion);

Committee had general responsibility for all standardization of matters related to interfaces between television equipment of all sorts, including such items as High Definition Serial Interfaces, Serial Digital Fiber Interfaces, Digital Audio Interfaces for Television, Ancillary Data, Jitter, Monitoring and Diagnostics, and the like.

SMPTE Committee on Packetized Television Technology (PT20)

Chairman during formation in late 1995 (relinquished when appointed Engrg. Dir. for TV);

Member 1996 through 1998 (completion);

Committee had general responsibility for all standardization of matters related to television carried in packetized form, including Digital Video Compression Techniques and Parameters, Interfaces and Protocols, Switching and Synchronization, System Design, and others.

SMPTE Engineering Director for Television

Appointed to four one-year terms, 1996 through 1999 (term limit)

Chairman of Television Standards Steering Committee (ST13-14)

Responsible for management of SMPTE television standards development on a worldwide basis including scheduling of meetings, assignment of projects, maintenance of workflow, coordination between committees of technical work. Provided oversight of standards development to assure compliance with SMPTE and ANSI requirements. During tenure in office, helped to increase document throughput several-fold.

Initiated regular, all-inclusive meeting series of television technology committees. Initiated regular meetings of TV Steering Committee during meeting series and participation by all committee and subcommittee leadership. Worked to turn SMPTE into internationally recognized standards body and initiated regular international meetings of TV technology committees. Implemented findings of joint SMPTE/EBU Task Force by reorganizing technology committees along lines of a layered structure and by promoting use of layering concepts necessary in documentation for future bit-stream-based television, as forecast by SMPTE/EBU Joint Task Force. Conceived idea of Dynamic Documents to permit efficient extensions of standards without requiring lengthy processing to speed up the development of standards.

SMPTE/EBU Task Force for Harmonized Standards for the Exchange of Program Material as Bit Streams

Co-chairman, 1996 (inception) to 1998 (completion);

The Task Force, which was jointly established by SMPTE and the European Broadcasting Union (EBU), and included members from the Association of Radio Industries and Businesses of Japan (ARIB), had the goal of setting the worldwide direction for the transition in production, post production, and broadcasting from raster-based to bit-stream-based television. It rationalized the convergence of television, computers, and communications with the aim of providing direction to the development of standards for the next 1-2 decades. The Task Force included 200 experts from four continents, meeting 18 times over about two years, to produce two thorough reports. Initial report on "User Requirements" was released in April, 1997, and published in SMPTE Journal of June, 1997. Final report of "Analyses and Results" was released in September, 1998, and published in SMPTE Journal of the same month.

SMPTE Registration Authority Ad Hoc Group (AHG)

Chairman, 1997 (inception) through 2007 (completion);

AHG was responsible for development of numerous registration functions required to support future digital television system functionality, including devising new types of standards documents called Dynamic Documents, setting up major Internet registration data access capability, providing Registration Authority services for MPEG-2 private data types, providing Registration Authority services for ATSC Program, Event, and Version Identifiers, and the like.

SMPTE Committee on Television Systems Technology (S22)

Chairman, 2000 through 2001;

Member, 2002 through 2007 (completion)

Committee had general responsibility for aspects of television technology that cross the boundaries of responsibility of the other SMPTE television technology committees and for understanding and managing the systems aspects of television. It therefore had responsibility for such matters as system timing references, time code, machine control, and system-level messaging. It also had responsibility for systemization of major areas of development such as data and metadata flows through and between facilities.

SMPTE Committee on Registration and Identification Technology (R30)

Chairman, 2002 (inception) through 2007 (completion);

Committee had general responsibility for development of databases and processing methods to handle registration of identifiers and code points used in structured data systems. It managed the SMPTE Registration Authority and provided processing of requests for registration. Its responsibilities extended to oversight of registration of MPEG-2 registration identifiers and general application of the Dynamic Documents concept.

SMPTE Working Group on Archive Exchange Format (V16.20 & TC-10E30)

Chairman, 2006 (inception) to present;

Committee is developing and documenting protocols for the exchange of media containing unlimited amounts of data between diverse archive management systems. The methods

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developed will permit data media exchange between systems of different manufacturers. They also will provide for robust recovery of data from damaged media and for data recovery without the use of an archive system.

SMPTE Standards Committee (ST13 & ST)

Member, 1988 to present;

Committee has overall responsibility for supervision of the SMPTE standards development process. It coordinates activities of the various committees, adopts the procedures used in developing and approving standards documents, and gives final approval to all documents for a specific technologies by evaluating the processes committees have used in their preparation and adoption.

ADVANCED TELEVISION SYSTEMS COMMITTEE

ATSC Technology & Standards Group (TSG) (formerly Technology Group on Distribution – T3)

Member, 1998 to present

The committee has responsibility for development of all ATSC standards, with numerous subgroups extant to deal with specific subjects. ATSC is the organization that develops the standards for the digital television broadcasting system adopted in North America and elsewhere in the world.

ATSC Specialist Group on Video (TSG/S6)

Member, 1998 to present

Specialist group is responsible for development of ATSC standards related to processing and coding of video. It developed original standards for video and is working on extensions to the standards related to video.

ATSC Specialist Group on Data Multiplex and Transport (TSG/S8)

Member, 1998 to present

The specialist group has responsibility for development of standards related to channel tuning, program guide information, conditional access, content protection and copy management, metadata, content identification, content advisories, and the like. In other words, it is responsible for work related to MPEG-2 Systems, including program-specific information and extensions thereto.

Chairman, Ad Hoc Group on Directed Channel Change (DCC), 1998 to present

AHG has documented a method for allowing broadcasters to cause receivers to present alternative streams of program content based upon selection criteria sent to receivers. This allows targeting program content and advertising to viewers for whom it is most appropriate.

Co-Chairman, Ad Hoc Group on Content Identification, 1999 to present

AHG is jointly developing with corresponding SMPTE AHG a method for unique identification of all forms of television content. This will allow automated tracking of programming and automation of television operations.

Member, Ad Hoc Group on Advanced EPG Metadata, 2000 to present

Member, Ad Hoc Group on Metadata Transport, 2001 to present

Member, Ad Hoc Group on Robust Transport, 2001 to present

ATSC Specialist Group on Radio Frequency Transmission (TSG/S9)

Member, 2000 to present

Specialist group is developing enhancements to the 8-VSB transmission system that is used as the terrestrial broadcasting method for ATSC-defined signals.

Chairman, Ad Hoc Group on Distributed Transmission & SFNs, 2001 to present

AHG reviewed the Transmitter Synchronization Standard for Distributed Transmission (A/110) that is a personal contribution and that is based on personally-developed technology, for which a patent is pending. It also prepared a Proposed Recommended Practice on Synchronized Multiple Transmitter Networks (PRP/111) that explains

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implementation aspects of Digital On-Channel Repeaters (DOCRs), Distributed Transmission, and Distributed Translators.

ATSC Implementation Subcommittee (IS)

Member, 1998 through 2006 (completion)

The committee reviews any and all matters related to the implementation of ATSC standards. Thus it is considering implementation of Directed Channel Change along with a variety of other aspects of digital television implementation.

Chairman, Ad Hoc Group on Directed Channel Change, 2001 to present

AHG is considering aspects of DCC that are not covered by the standard. Included are methods for broadcasting using DCC and design considerations for receivers that implement DCC.

Member, Systems Evaluation Working Group (SEWG), 2000 to present

SEWG examines all sorts of systems aspects of implementation of ATSC standards. This has included issues of latency of transmission and resulting differences in program emission timing, systems aspects of DCC, appropriate interfaces for carriage of various signals, methods for processing and transporting closed captions, and the like.

Member, Radio Frequency Working Group (RFGW), 2000 to present

RFGW has examined the planning factors used to determine coverage of digital television stations and found flaws in the methods used by earlier committees and the FCC. It is considering methods to improve the accuracy of prediction of signal coverage.

OTHER PROFESSIONAL ACTIVITIES

Video Services Forum, Inc.

Founder and Facilitator, 1998 (inception) through 2000;

The Video Services Forum is the principal organization of common carriers of television services over telephony and satellite networks, the manufacturers serving them, and the users of their services. It includes three sub-organizations: the Video Services Provider Forum, the Video Services Industry Forum, and the Video Services User Group. Services provided to the Forum as Facilitator included incorporating the organization, chairing all meetings including those of the Board of Directors, providing financial management, and supervising on-going development of industry technical and operations standards and practices. Also provided support for the annual VidTranS conference.

Society of Broadcast Engineers (SBE):

Member, 1968 to present;

Helped found Philadelphia chapter and was secretary;

Helped found Northern/Central New Jersey chapter, Certification Chairman, 1991-1996.

Institute of Electrical and Electronics Engineers (IEEE)

Member, 1991 to present.

Society of Cable Telecommunications Engineers (SCTE)

Member, 1993 to present.

Member, Digital Video Subcommittee (DVS), 1996 to present.

Northern California Frequency Coordinating Committee (NCFCC):

Founder in 1978; Chairman, 1978 to 1984.

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Attachment B

PAPERS AND PUBLICATIONS:

S. M. Weiss, "Machine Control at KPIX: Cornerstone to Digital," Broadcast Management/Engineering (BM/E), Feb., 1981, pp. 51-59.

S. M. Weiss & R. Marconi, "Putting Together the SMPTE Demonstrations of Component Coded Digital Video, San Francisco, 1981," SMPTE Journal, Oct., 1981, pp. 926-938, and 4:2:2 Digital Video, SMPTE, White Plains, NY, 1989, pp. 46-58.

S. M. Weiss, "The Transition from Analog to Digital – A Scenario," 123rd SMPTE Technical Conference, October 30, 1981, #138.

S. M. Weiss & R. Lorentzen, "How Teletext Can Deliver More Service and Profits," Broadcast Communications, Aug., 1982, pp. 54-60.

S. M. Weiss, "Small Format Video Recorders – A Systems Perspective," 124th SMPTE Technical Conference, November 8, 1982, #11.

S. M. Weiss, "Rolling Your Own – Customized Microcomputers for Custom Applications," 17th SMPTE Television Conference, February 5, 1983, #34.

S. M. Weiss, "A Progress Report from the Working Group on Component Analog Video Standards," 125th SMPTE Technical Conference, November 3, 1983, #80.

S. M. Weiss, "Component Analog Video Standards – A Progress Report," 10th International Broadcasting Convention (IBC), September 22, 1984.

S. M. Weiss, "Working Group Report and Test Results on S-MAC for the Studio," 126th SMPTE Technical Conference, November 1, 1984, #67.

S. M. Weiss, "In the Beginning, There Were Red, Green, and Blue ... A Tutorial on Component Video and a Working Group Progress Report," 19th SMPTE Television Conference, February 15, 1985, #8.

S. M. Weiss, "S-MAC: Proposed SMPTE Studio Component Video Distribution System," National Association of Broadcasters (NAB) Convention, April 15, 1985.

S. M. Weiss & S. N. Baron, "Components at a Crossroads: Making the Right Choices," 127th SMPTE Technical Conference, October 30, 1985.

S. M. Weiss, "Trouble in Transition City: NTSC Setup in a Component Environment," 127th SMPTE Technical Conference, October 31, 1985.

S. M. Weiss, "Component Video – Where Are We Going?" National Association of Broadcasters (NAB) Convention, April 14, 1986.

S. M. Weiss, "Practical Considerations in Implementing Component Video Systems," 11th International Broadcasting Convention (IBC), September 23, 1986.

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Attachment B

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S. M. Weiss, "Implementing Component Video Systems: Avoiding the Pitfalls," 128th SMPTE Technical Conference, October 29, 1986.

S. M. Weiss, "Extending Current Digital Video Standards to 10 Bits and Beyond," 129th SMPTE Technical Conference, November 2, 1987, #59.

S. M. Weiss, "Migrating to Advanced Television in the United States," 12th International Broadcasting Convention (IBC), September 27, 1988.

S. M. Weiss & K. H. Powers, "NTSC Compatible Advanced Television System and Implications for Studio Standards," Better Video Images, SMPTE, White Plains, NY, pp. 254-266; also presented at 23rd SMPTE Television Conference, February 4, 1989.

S. M. Weiss, "Evolutionary Approaches to Advanced Television – Making the Migration Possible," Better Video Images, SMPTE, White Plains, NY, pp. 361-375; also presented at 23rd SMPTE Television Conference, February 4, 1989.

S. M. Weiss, "Selecting Appropriate HDTV Production Standards for North America: Making the Puzzle Pieces Fit," 131st SMPTE Technical Conference, October 22, 1989.

K. H. Powers & S. M. Weiss, "QDA – The Progressive-Scan Alternative for High Definition Electronic Production Standards," Television – Merging Multiple Technologies, SMPTE, White Plains, NY, pp. 340-349; also presented at 24th SMPTE Television Conference, January 27, 1990.

S. M. Weiss, "Widescreen 525 – An Economical Entry into Advanced Television," National Association of Broadcasters (NAB) Convention, April 1, 1990.

S. M. Weiss, "Rolling Out Advanced Television in the United States," HDTV'90 Colloquium, Ottawa, June 28, 1990.

S. M. Weiss, "The Economics of HDTV for the Commercial Broadcaster," 3rd HDTV Update Conference, Association of Maximum Service Television, September 6, 1990.

S. M. Weiss, "Implementation Considerations for Simulcast HDTV Transmission at Local Television Stations," 40th IEEE Broadcast Technology Symposium, September 7, 1990.

S. M. Weiss, "The Technology of Widescreen 525: Behind the Economics," 132nd SMPTE Technical Conference, October 17, 1990, #133.

S. M. Weiss, "Advanced Television," monthly column in TV Technology magazine, beginning with issue of July, 1992, and continuing through May, 1997.

S. M. Weiss, "Advanced Television Implementation Studies in the FCC Advisory Committee Process," Workshop on High Data-Rate Digital Broadcasting, Massachusetts Institute of Technology, October 26, 1992.

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Attachment B

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S. M. Weiss, "The 'New' NTSC Color Television Standard – SMPTE 170M," 134th SMPTE Technical Conference, November 9, 1992, #1.

S. M. Weiss, "Planning for Advanced Television in the United States," Advanced Broadcasting Systems of Canada, March 30, 1993.

S. M. Weiss & R. H. Stow, NAB 1993 Guide to HDTV Implementation Costs, National Association of Broadcasters, Washington, D.C., April, 1993.

S. M. Weiss, "Digital Video Compression, Wireless Cable, and Education," California Distance Learning Summit IV, The Alliance for Distance Education in California, April 27, 1993.

S. M. Weiss, "Budgeting for Initial Implementation of HDTV," Society of Broadcast Engineers Convention, October 1, 1993.

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Over 75 other papers and presentations given to local chapters of SMPTE, SBE, STE, IEEE, plus NAB Convention, Video Expo, etc., on subjects of digital video, teletext, machine control, audio systems, plant timing, frequency coordination, Advanced Television, Advanced Compatible Television, High Definition Television (HDTV), Digital Video Compression, Digital Television (DTV), video as bit streams, distributed transmission, and others. In addition, have served numerous times as session chairman or panel moderator at NAB Conventions, SMPTE Conferences, IEEE Broadcast Technology Symposia, EIA Digital Video Workshops, International Broadcasting Conventions (IBC), Montreux International Television Symposia, and Wireless Cable Association Conventions.